THERE IS CLAIMED:

1. A single-pole double-throw switch comprising an input line portion and two output line portions connected to said input line portion at a branch point and defining with said input line portion two propagation channels for electromagnetic signals reaching said branch point via said input line portion, in which switch each output line portion includes a two-state electronic component constituting either a substantially open circuit or a substantially short circuit as a function of the application of an appropriate command and being in one of said two states in the absence of a command, and said two identical electronic components are each disposed in series in or in parallel with one of said two output line portions, which switch has an asymmetrical structure, said two propagation channels differing in their configuration and/or in the parity of their electrical length, expressed in quarter-wavelengths, between said components and said branch point, so that, regardless of the state of said components, one of said two channels is open for electromagnetic signals and the other channel is closed for electromagnetic signals.
2. The switch claimed in claim 1 wherein said two components each constitute an open circuit in the absence of a command.
3. The switch claimed in claim 1 wherein said two components have a zero or quasi zero impedance in the absence of a command.
4. The switch claimed in claim 1 wherein one of said electronic components is disposed in series in one of said two output line portions and the other of said electronic components is disposed in parallel in the other of said output line portions and the following conditions are satisfied:

   - L_{AB} must be equal to an integer multiple of a half-wavelength;
   - L_{AC} must be equal to an odd integer multiple of a quarter-wavelength;
   - L_{CD} must be equal to an integer multiple of a half-wavelength;

   where:

   - L_{XY} is the electrical distance between points X and Y;
   - A is the branch point between input line portion/output line portions;
   - B is the input point of series component;

- C is the branch point between output line portion/shunt line portion at level of the line portion comprising said parallel component; and

- D is the input point of said parallel component.

5. The switch claimed in claim 1 wherein said two components are disposed in parallel on said two output line portions and the following conditions are satisfied:

- L_{AB} must be equal to an odd integer multiple of a half-wavelength;

- L_{AC} must be equal to an odd integer multiple of a quarter-wavelength;

- L_{CD} must be equal to an integer multiple of a half-wavelength;

- L_{BE} must be equal to an odd integer multiple of a quarter-wavelength;

where:

- L_{XY} is the electrical distance between points X and Y;

- A is the branch point between input line portion/output line portions;

- B and C are the branch points between respective output line portions/shunt line portions;

- E and D are the input points of said parallel components.

6. The switch claimed in claim 1 wherein said electronic components are chosen in the group comprising solid state components and micromachined components.

7. A two for one redundant structure system comprising two identical parallel functional branches, wherein electromagnetic signals are selectively transmitted to one of said two branches via a switch as claimed in any one of claims 1 to 6 and each output line portion of said switch is connected to the input of one of said two branches of said system.

8. The system claimed in claim 7 wherein the outputs of said two branches are connected to output line portions of a switch as claimed in claim 1, oppositely connected, so as to form a device for switching two channels to one channel.